REMARKS

This is intended as a full and complete response to the Office Action dated May 17, 2006, having a shortened statutory period for response set to expire on August 17, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-37 were pending in the application and rejected by the Examiner. By way of this reply, claims 14, 17, 18, 35, and 36 have been cancelled, and claims 15 and 16 have been rewritten in independent form to incorporate the limitations of claim 14. Therefore, claims 1-13, 15-16, 19-34, and 37 are now pending for further examination.

Claims 1, 4, 5, 6, 8, 9, 11, 15, 16, 19, 20, 26, 27, and 32-37 were rejected under 35 USC § 102(a) as anticipated by *Rubino, et al.* (U.S. Patent No. 5,527,215). Claims 3 and 17 were rejected under 35 USC § 103(a) as unpatentable over *Rubino, et al.* Claims 2, 12, 13, 23, 24, 28, 30 and 31 were rejected under 35 USC § 103(a) as unpatentable over *Rubino, et al.* in view of *Beardsley et al.* (U.S. Patent No. 6,299,515). Claims 7, 10, 21, 22, 25, and 29 were rejected under 35 USC § 103(a) as unpatentable over *Meikle, et al.* (U.S. Patent No. 5,698,455) in view *Beardsley, et al.* And further in view of *Okamura et al.* (U.S. Patent No. 6,332,860). These rejections are respectfully traversed.

Regarding independent claim 1 and claims dependent thereon, Applicant maintains that *Rubino, et al.* does not teach a "semiconductor polishing device." The Examiner is advised that claim terms are presumed to have the ordinary and customary meanings attributed to them by those of ordinary skill in the art. MPEP § 2111.01. The art that is relevant to the present invention is the fabrication of integrated circuits and other electronic devices. This is evident from the present application, which discloses that a semiconductor polishing device is designed to planarize a semiconductor substrate in a very precise, uniform, and repeatable manner [see specification, page 2, line 31 through page 3, line 3]. The present application further discloses that the semiconductor polishing process "involves holding a substrate against a polishing pad under controlled pressure, temperature and rotational velocity of the pad in the presence of the slurry or other fluid medium" [see specification, page 2, lines 24-26].

Applicant respectfully submits that a person of ordinary skill in the art of the fabrication of integrated circuits and other electronic devices would not consider the polishing device of *Rubino, et al.* to be a "semiconductor polishing device." Therefore, claim 1 and its dependent claims, claims 2-13 are patentable over the prior art.

Claim 15 is patentable over *Rubino, et al.*, because it recites that "the one or more fluid retaining grooves extend from the center portion of the substrate polishing pad to an edge of the substrate polishing pad." *Rubino, et al.* does not teach fluid-retaining grooves that extend from the center portion of the polishing pad to an edge of the polishing pad. Rather, *Rubino, et al.* teaches: "The pad contains at least one groove which, notably, is contained within the circumference of the disc shaped pad" [Col. 1, lines 54-56]; "The pad may also contain a plurality of grooves, all of which are wholly contained within the circumference of the pad" [Col. 1, lines 58-60]; and "In no case do non-continuous grooves in the pad intersect the perimeter of the pad" [Col. 3, lines] 53-54. See also FIGS. 1-12. Therefore, claim 15 is patentable over the prior art.

Claim 16 is patentable over *Rubino, et al.*, because it recites that "the substrate polishing pad comprises perforations extending between the polishing surface and the mounting surface." *Rubino, et al.* fails to teach a polishing pad with perforations that extend between the polishing surface and the mounting surface. *Rubino, et al.* is silent regarding a polishing pad with perforations. The open cell structure of the foam pad taught in *Rubino, et al.* does not meet this limitation because: (i) open cells are not perforations; and (ii) there is nothing in *Rubino, et al.* that teaches that the cells extend from the polishing surface and the mounting surface. Therefore, claim 16 is patentable over the prior art.

Regarding independent claim 19 and claims dependent thereon, *Rubino, et al.* does not teach an apparatus for polishing that has "a polishing head rotatably mounted in facing relation to the rotatable platen." *Rubino, et al.* teaches "The pad 12 is rotated while the finishing surface 14 is brought into contact with the workpiece surface" [Col. 4, lines 29-31], and is silent regarding a polishing head or other means that is rotatably mounted in a facing relation to the rotatable platen. Therefore, claim 19 and its dependent claims, claims 20-27, are patentable over the prior art.

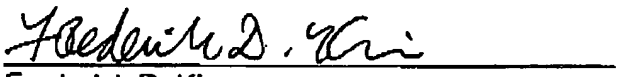
Claim 32 and claims dependent thereon recite a "semiconductor polishing device." As set forth above with respect to claim 1, *Rubino, et al.* does not teach a "semiconductor polishing device." Therefore, claim 32 and its dependent claims, claims 33-34, are patentable over the prior art.

Claim 37 recites "a polishing head rotatably mounted in facing relation to the rotatable platen." As set forth above with respect to claim 19, *Rubino, et al.* does not teach an apparatus for polishing that has "a polishing head rotatably mounted in facing relation to the rotatable platen." Therefore, claim 37 is patentable over the prior art.

Regarding independent claim 28 and claims dependent thereon, Applicant traverses the rejection under 35 USC § 103(a) over *Rubino, et al.* in view of *Beardsley et al.* on the following grounds. First, Applicant maintains that *Rubino, et al.* does not teach an apparatus having a platen. As noted above regarding claim 1, claim terms are presumed to have the ordinary and customary meanings attributed to them by those of ordinary skill in the art. A person of ordinary skill in the art of the fabrication of integrated circuits and other electronic devices would not consider the flat plate of *Rubino, et al.* [Col. 3, lines 1-6] to be a platen. Second, it is noted that the pad of *Rubino, et al.* attached to the flat plate already has grooves. These grooves perform the function of preventing excess finishing liquid from being thrown out from the perimeter of a rotating buff pad. If the platen grooves in *Beardsley et al.* are applied to the flat plate of *Rubino, et al.*, the purpose of having grooves in *Rubino, et al.* will be obviated because the finishing liquid will be thrown out from the edge openings of the platen grooves. Hence, there would be no motivation to modify the apparatus of *Rubino, et al.* in view of *Beardsley et al.* as the Examiner has done. Therefore, claim 28 and its dependent claims, claims 29-31, are patentable over the prior art.

Having addressed all issues set out in the Office action, Applicant submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



Frederick D. Kim
Registration No. 38,513
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)